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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

MAR. 02 1990

Diane Wehner
State of Delaware
Division of Air and Waste Management
DNREC
715 Grantham Lane
New Castle Delaware 19720

RE: Comments on Pump Testing Standard Chlorine

Dear Ms. Wehner:

Please find comments on the pump test for the Potomac aquifer at Standard Chlorine on the enclosure(s). I am scheduled for training classes, and will not be able to answer any of your questions. If you have any questions please contact Ms. Bernice Pasquini at (215) 597-2365.

Sincerely,

Robert Guarni

Robert Guarni
Remedial Project Manager
DE/MD Section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Review of the Proposed Pump Test Specifications for the Standard Chlorine site **DATE:** MAR 2 1990

FROM: Robert Guarni, EPA RPM
Bernice Pasquini, EPA Geologist

TO: Diane Wehner, DE DNREC ES

Important elements of the pump test are discussed, however, specific details of the test are not outlined in the subject document. The following should be included in the subject document:

Proposed Test Specifications

1) It should be specified in the narrative that the aquifer test is to be performed within one to two days after the short term step drawdown test or until the water elevation returns to its previously recorded static level (i.e. prior to step drawdown test).

2) Any production wells (i.e. pumping wells) which would be within the cone of influence of pumping well OR6A should be identified. These pumping wells need to be controlled during the entire pump test as far as maintaining a constant pumping rate.

3) The narrative in the document indicates that continuous water level monitoring will be performed on specific wells. It is also indicated that periodic water level measurements will be obtained in the remaining Standard Chlorine wells. The narrative should describe the following in more detail:

   a) The time intervals for measuring drawdown in the observation wells and pumping well which will define continual monitoring for this pump test (accepted intervals are indicated in the Johnson Division, Groundwater And Wells, 2nd edition).

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b) The equipment that will be used to continually measure water levels (e.g. In SITu HERMIT 1000).

c) Time intervals during the pump test that defines the periodic water level measurements to be obtained need to be included in the narrative.

X d) The equipment to be used in measuring and recording the drawdown should be cited in the narrative (e.g. manual water level measurements).

4) Since a large volume of ground water will be discharged to Red Lion Creek which could potentially be contaminated, an EPA NPDES staff person was contacted to determine whether there were any requirements under the Clean Stream Act. Apparently, OR6A will have to be sampled and the analysis should meet the criteria of the Water Quality Standards for the State of Delaware. The contact person which can provide you with this criteria is Sarah Cooksey. She can be reached by telephone at (302) 736-5731.

5) It is also recommended and would be prudent to have monitoring equipment (such as an HNu/OVA) hooked up at the pumping well so that during the course of the pump test ground water can be monitored for organics.

6) As far as the wells indicated in this document to serve as observation wells, I recommend that two observation wells be chosen among the Tybouts Corners Landfill monitoring wells. The choice of these wells should be made by DE DNREC and EPA. These wells should have continual water level measurements taken.

7) The solution used in estimating drawdown in wells within a radial distance of the pumping well may not be appropriate in application to the Standard Chlorine site. It would not be appropriate since one of the assumptions of this solution is that the confining unit is continuous and areally extensive. From the information collected to date, this assumption could not be corroborated.

If you have questions concerning the preceding comments, feel free to contact us.